

SYSTEMS APPLICATIONS OF ACOUSTIC SURFACE WAVE

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Abstract

The unique characteristics of surface wave devices provide cost-effective new solutions to system problems which extend ultimate system performance capabilities. This paper summarizes the current and projected performance of surface wave delay lines, tapped delayed lines, dispersive filters, and band-pass filters with emphasis on how it relates to improved capabilities of military radar and spread spectrum communications systems. Examples include applications in radar pulse compression and multiple target indicators, and low probability of intercept and multiple access communication systems.